## INTERNATIONALSEARCHREPORT

International application No. PCT/JP2005/024018

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl. H01L21/027(2006.01), H01L21/20(2006.01), H01L21/336(2006.01), H01L29/786(2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. H01L21/027, H01L21/20, H01L21/336, H01L29/786

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1911-2006
Registered utility model specifications of Japan 1996-2006
Published registered utility model applications of Japan 1994-2006

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	JP 10-284418 A (SHARP KK) 1998.10.23 Claims, [0023], [0051]-[0060], Figs.1-3 & US 6281470 B1	1-19
A	JP 2000-277450 A (MATSUSHITA ELECTRIC IND CO LTD) 2000.10.06 Claims (Family; none)	1-19
A	JP 6-291035 A (AG TECHNOLOGY KK) 1994.10.18 Claims (Family; none)	1-19

Further documents are listed in the continuation of Box C.	See patent family annex.	
Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such	
"P" document published prior to the international filing date but later than the priority date claimed	combination being obvious to a person skilled in the art  "&" document member of the same patent family	
Date of the actual completion of the international search	Date of mailing of the international search report	
05.04.2006	18.04.2006	
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3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Telephone No. +81-3-3581-1101 Ext. 3274	